Conclusion

Mobile Application Development in iOS
School of EECS
Washington State University
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Course Outcomes

• Proficient with iOS development environment
• Design, implement, test and deploy iOS app
• Able to use various iOS frameworks
Swift

• Optionals, optional binding, optional chaining (?!)

```swift
if let x = does?.this?.thing?.exist {
    print("\(x) exists")
}
let y = this!.thing!.better!.exist!
```

• Closures

```swift
{
    print("Hello. I am code.")
    print("Send me anywhere."")
}
```

• Delegation

```swift
class ViewController: UIViewController, UITextFieldDelegate {
    myTextField.delegate = self // In viewDidLoad
    func textFieldDidEndEditing (_ textField: UITextField) {
    }
}
```
Design

- Storyboard
  - Auto-layout

- Model-View-Controller (MVC) paradigm
Navigation and Segues
Tables

- Table View Controller
- Table View
- Table Cells
- Cell interaction
Settings

- In-app settings
  - UserDefaults
- Device settings
  - Settings Bundle
Alerts and Notifications

- Alerts
- Internal notifications
- Local notifications
Gestures

Tap Gesture Recognizer

UI gesture recognizers recognize simple tap gestures.

Sends an action message when the user taps.

A tap gesture recognizer can be configured for single or multiple taps, with single or multiple touches.
Sensors

- Sensor types
- Sensor availability
- Accessing sensor data
  - CoreMotion
  - CoreLocation
- MapKit
Communications

- URLSession
- WebKit
Storage

• File I/O
• Core Data
• Firebase
Multimedia

• Audio recording, access, and playback
  – Speech recognition and synthesis

• Image capture, access, and display

• Video recording, access, and playback
Apple Watch

- Xcode configuration
- WatchKit
- Notifications
- Complications
- Sensors
iOS Frameworks

- UIKit
- AVFoundation
- CoreLocation
- CoreMotion
- CoreData
- MapKit
- SpriteKit
- WebKit
- WatchKit
- ARKit
- CloudKit
- HealthKit
- HomeKit
- GameKit
- CoreML
- SceneKit
- MusicKit
- Over 50 more...
Will you develop the next great mobile app?

Worldwide mobile app revenues in 2014 to 2023
(in billion U.S. dollars)
Mobile App Development

Thank you!

• Please fill out your Course Evaluation!

• Blue Course Evaluations on my.wsu.edu